General

Guideline Title

Vaginitis.

Bibliographic Source(s)

American College of Obstetricians and Gynecologists (ACOG). Vaginitis. Washington (DC): American College of Obstetricians and Gynecologists (ACOG); 2006 May. 12 p. (ACOG practice bulletin; no. 72). [79 references]

Guideline Status

This is the current release of the guideline.

The American College of Obstetricians and Gynecologists (ACOG) reaffirmed the currency of the guideline in 2011.

Recommendations

Major Recommendations

The grades of evidence (I-III) and levels of recommendations (A-C) are defined at the end of the "Major Recommendations" field

The following recommendations are based on good and consistent scientific evidence (Level A):

> Women with complicated vulvovaginal candidiasis should receive more aggressive treatment than women with an uncomplicated episode.
> To prevent reinfection, women with trichomoniasis should avoid intercourse until they and their partner have received treatment.

The following recommendations and conclusions are based on limited or inconsistent scientific evidence (Level B):

> Microscopy is the first line for diagnosing vulvovaginal candidiasis and trichomoniasis. In selected patients, culture for yeast and *T vaginalis* should be obtained in addition to standard office-based testing.
> Douching is not recommended for the prevention or treatment of vaginitis.
> Self-diagnosis of vaginitis is unreliable.

The following recommendation is based primarily on consensus and expert opinion (Level C):

> Clinical evaluation of women with vaginal symptoms should be encouraged, particularly for women who fail to respond to self-treatment with a nonprescription antifungal.

Definitions:

Grade of Evidence

I: Evidence obtained from at least one properly designed randomized controlled trial.

II-1: Evidence obtained from well-designed controlled trials without randomization.

II-2: Evidence obtained from well-designed cohort or case–control analytic studies, preferably from more than one center or research group.

II-3: Evidence obtained from multiple time series with or without the intervention. Dramatic results in uncontrolled experiments also could be regarded as this type of evidence.

III: Opinions of respected authorities, based on clinical experience, descriptive studies, or reports of expert committees.

Levels of Recommendations

Level A — Recommendations are based on good and consistent scientific evidence.

Level B — Recommendations are based on limited or inconsistent scientific evidence.

Level C — Recommendations are based primarily on consensus and expert opinion.

Clinical Algorithm(s)

None provided

Scope

Disease/Condition(s)

Vaginitis, including:

- Bacterial vaginosis
- Vulvovaginal candidiasis
- Trichomoniasis
- Atrophic vaginitis
- Vulvar dermatologic conditions (e.g., desquamative inflammatory vaginitis)
- Vulvodynia

Guideline Category

Counseling

Diagnosis

Evaluation

Treatment

Clinical Specialty

Family Practice

Infectious Diseases

Internal Medicine

Obstetrics and Gynecology

Intended Users

Physicians

Guideline Objective(s)

To aid practitioners in making decisions about appropriate obstetric and gynecologic care
To provide information about the diagnosis and treatment of vaginitis

Target Population

Women and pediatric or adolescent girls with vulvovaginal symptoms such as itching, burning, irritation, and abnormal discharge

Interventions and Practices Considered

Evaluation and Diagnosis

Focused history
Physical examination
Laboratory tests (vaginal pH, amine test, saline and potassium hydroxide microscopy)
Vaginal cultures or polymerase chain reaction tests for trichomonas or yeast in selected patients
Gram stain for bacterial vaginitis
Enzyme activity rapid test
Trichomonas vaginalis antigen
DNA testing for *Gardnerella vaginalis*, *T. vaginalis*, and *Candida* species
DNA amplification testing for *Neisseria gonorrheae* and *Chlamydia trachomatis*
In pediatric patients, microscopy for pinworm eggs

Treatment

Medical therapy (butoconazole, clotrimazole, fluconazole, miconazole, nystatin, terconazole, tioconazole, clindamycin, metronidazole, tinidazole)
Treatment of sexual partners
Vaginal recolonization with lactobacillus
Complementary/alternative therapies (unproven)
In pediatric patients, vaginal irrigation
Douching (specifically not recommended)

Counseling

Major Outcomes Considered

Incidence of recurrent symptoms
Development of antibiotic resistance

Methodology

Methods Used to Collect/Select the Evidence

Hand-searches of Published Literature (Primary Sources)

Hand-searches of Published Literature (Secondary Sources)

Searches of Electronic Databases

Description of Methods Used to Collect/Select the Evidence

The MEDLINE database, the Cochrane Library, and the American College of Obstetricians and Gynecologists' own internal resources and documents were used to conduct a literature search to locate relevant articles published between January 1985 and February 2006. The search was restricted to articles published in the English language. Priority was given to articles reporting results of original research, although review articles and commentaries also were consulted. Abstracts of research presented at symposia and scientific conferences were not considered adequate for inclusion in this document. Guidelines published by organizations or institutions such as the National Institutes of Health and American College of Obstetricians and Gynecologists were reviewed, and additional studies were located by reviewing bibliographies of identified articles.

2011 Reaffirmation

For reaffirmation of a current Practice Bulletin, MEDLINE and Cochrane are searched for new literature. At the discretion of the review committee, additional databases may be searched for particular topics as warranted. In addition, committee members identify relevant literature for review.

The Committee on Practice Bulletins—Obstetrics met in 2011 and reaffirmed this guideline. A committee member reviewed the document and new literature on the topic. The document was then reviewed by the committee and the committee agreed that it is current and accurate.

Number of Source Documents

Not stated

Methods Used to Assess the Quality and Strength of the Evidence

Weighting According to a Rating Scheme (Scheme Given)

Rating Scheme for the Strength of the Evidence

Studies were reviewed and evaluated for quality according to the method outlined by the U.S. Preventive Services Task Force:

I: Evidence obtained from at least one properly designed randomized controlled trial.

II-1: Evidence obtained from well-designed controlled trials without randomization.

II-2: Evidence obtained from well-designed cohort or case–control analytic studies, preferably from more than one center or research group.

II-3: Evidence obtained from multiple time series with or without the intervention. Dramatic results in uncontrolled experiments also could be regarded as this type of evidence.

III: Opinions of respected authorities, based on clinical experience, descriptive studies, or reports of expert committees.

Methods Used to Analyze the Evidence

Systematic Review

Description of the Methods Used to Analyze the Evidence

Not stated

Methods Used to Formulate the Recommendations

Expert Consensus

Description of Methods Used to Formulate the Recommendations

Analysis of available evidence was given priority in formulating recommendations. When reliable research was not available, expert opinions from obstetrician–gynecologists were used. See also the "Rating Scheme for the Strength of Recommendations" field regarding Grade C recommendations.

2011 Reaffirmation

Each American College of Obstetricians and Gynecologists (ACOG) Practice Bulletin is reviewed every 18-24 months by a member of the Practice Bulletins Committee. The reviewer presents the practice bulletin and any new literature at a full committee hearing. The committee then reaches a consensus on whether to reaffirm or withdraw the practice bulletin.

Rating Scheme for the Strength of the Recommendations

Based on the highest level of evidence found in the data, recommendations are provided and graded according to the following categories:

Level A — Recommendations are based on good and consistent scientific evidence.

Level B — Recommendations are based on limited or inconsistent scientific evidence.

Level C — Recommendations are based primarily on consensus and expert opinion.

Cost Analysis

A formal cost analysis was not performed and published cost analyses were not reviewed.

Method of Guideline Validation

Internal Peer Review

Description of Method of Guideline Validation

Practice Bulletins are validated by two internal clinical review panels composed of practicing obstetrician-gynecologists generalists and sub-specialists. The final guidelines are also reviewed and approved by the American College of Obstetricians and Gynecologists (ACOG) Executive Board.

Evidence Supporting the Recommendations

Type of Evidence Supporting the Recommendations

The type of supporting evidence is identified and graded for each recommendation (see "Major Recommendations").

Benefits/Harms of Implementing the Guideline Recommendations

Potential Benefits

Appropriate diagnosis and treatment of patients with vaginitis

Potential Harms

Topical treatments may cause local side effects, such as burning and irritation. Occasionally, oral therapy may cause systemic side effects, such as gastrointestinal intolerance, headache, and liver function test elevations; these usually are mild and self-limited. Allergic reactions to oral therapy are rare.
Although daily oral ketoconazole was previously described as an effective suppressive therapy in women with recurrent vulvovaginal candidiasis, weekly fluconazole has a lower risk of liver toxicity and should be used instead of ketoconazole.
Metronidazole may be associated with significant gastrointestinal symptoms. Disulfiram-like reactions may occur with both oral and topical metronidazole.
Although high-level resistance to metronidazole is considered rare, low level in vitro resistance may be as high as 5%.
Physical side effects of topical nonprescription antifungal agents consist primarily of localized burning and irritation in about 5% of women. If used for the wrong condition or if the patient has vulvovaginal candidiasis but fails to respond to treatment, topical nonprescription antifungal use may lead to a delay in accurate diagnosis and appropriate treatment.

Pregnant Women

Although low-dose short-term fluconazole use is not associated with known birth defects, higher doses of 400 to 800 milligrams per day have been linked to birth defects. Thus, treatment of vulvovaginal candidiasis in pregnancy should consist of one of the topical imidazole therapies listed in Table 1 of the original guideline document, probably for 7 days.
Safety data on tinidazole in pregnant women are too limited to be of use.

Qualifying Statements

Qualifying Statements

These guidelines should not be construed as dictating an exclusive course of treatment or procedure. Variations in practice may be warranted based on the needs of the individual patient, resources, and limitations unique to the institution or type of practice.

Implementation of the Guideline

Description of Implementation Strategy

An implementation strategy was not provided.

Implementation Tools

Audit Criteria/Indicators

Patient Resources

For information about availability, see the *Availability of Companion Documents* and *Patient Resources* fields below.

Institute of Medicine (IOM) National Healthcare Quality Report Categories

IOM Care Need

Getting Better

IOM Domain

Effectiveness

Patient-centeredness

Timeliness

Identifying Information and Availability

Bibliographic Source(s)

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Adaptation

Not applicable: The guideline was not adapted from another source.

Date Released

2006 May (reaffirmed 2011)

Guideline Developer(s)

American College of Obstetricians and Gynecologists - Medical Specialty Society

Source(s) of Funding

American College of Obstetricians and Gynecologists (ACOG)

Guideline Committee

American College of Obstetricians and Gynecologists (ACOG) Committee on Practice Bulletins-Gynecology

Composition of Group That Authored the Guideline

Not stated

Financial Disclosures/Conflicts of Interest

Not stated

Guideline Status

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The American College of Obstetricians and Gynecologists (ACOG) reaffirmed the currency of the guideline in 2011.

Guideline Availability

Electronic copies: None available

Print copies: Available for purchase from the American College of Obstetricians and Gynecologists (ACOG) Distribution Center, PO Box 933104, Atlanta, GA 31193-3104; telephone, 800-762-2264, ext. 192; e-mail: sales@acog.org. The ACOG Bookstore is available online at the ACOG Web site.

Availability of Companion Documents

Proposed performance measures are included in the original guideline document.

Patient Resources

The following is available:

- Vaginitis. Causes and treatment. Atlanta (GA): American College of Obstetricians and Gynecologists (ACOG); 2005.

Electronic copies: Available from the American College of Obstetricians and Gynecologists (ACOG) Web site.

Print copies: Available for purchase from the American College of Obstetricians and Gynecologists (ACOG) Distribution Center, PO Box 933104, Atlanta, GA 31193-3104; telephone, 800-762-2264, ext. 192; e-mail: sales@acog.org. The ACOG Bookstore is available online at the ACOG Web site.

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NGC Status

This NGC summary was completed by ECRI Institute on August 3, 2007. The information was verified by the guideline developer on September 10, 2007. The currency of the guideline was reaffirmed by the developer in 2011 and this summary was updated by ECRI Institute on November 30, 2011.

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